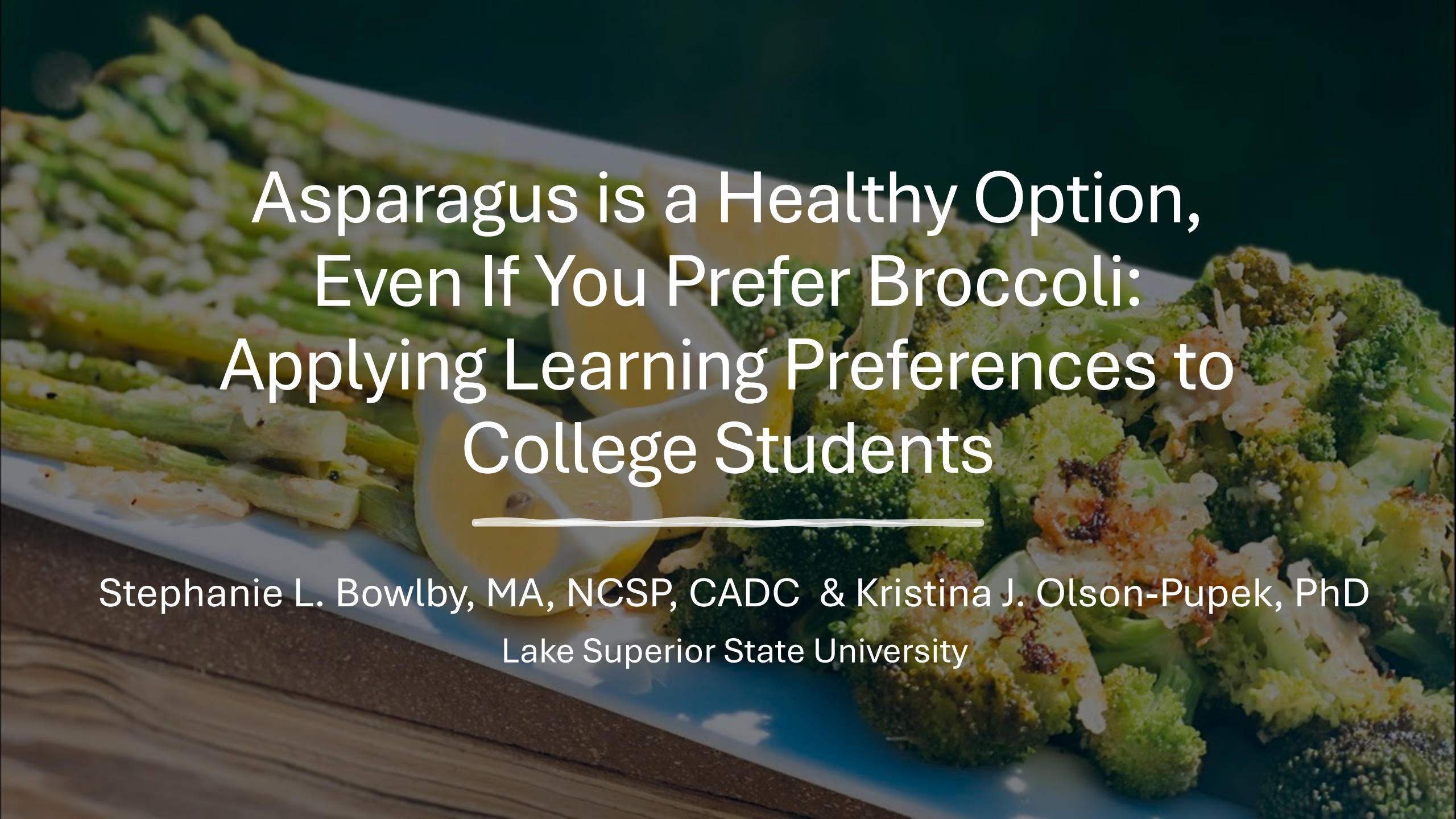

Asparagus is a Healthy Option, Even If You Prefer Broccoli: Applying Learning Preferences to College Students

Stephanie L. Bowlby, MA, NCSP, CADC & Kristina J. Olson-Pupek, PhD

Lake Superior State University

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Learning Objectives

- Recap the extensive research debunking the **NEUROMYTH** that is “Learning Styles”
- Review the role of multiple sensory modalities in learning to better understand how to effectively learn from a neuroscience perspective
- Identify evidence-based learning preferences of modern learners and how to implement some of those preferences

Debunking the Learning Styles NeuroMyth

Part 1

The “Learning Styles” NeuroMyth

- More than 70 learning styles theories have been developed (Coffield et al., 2004)
- What do they have in common?
  - People learn in different ways
  - By matching the way an individual learns with instruction provided, learning will be optimal

Prevalence of People Who Still Believe the Myth

Evidence from several studies show belief in learning styles is pervasive in education

82% of trainee teachers from a UK sample (Howard-Jones et al., 2009)	97.6% of preservice teachers in Turkey (Dündar & Gündüz, 2016)	Over 90% of teachers in 5 countries including the UK, Netherlands, Turkey, Greece, and China (Howard-Jones, 2014)

Even surveying the general public, Willingham et al. (2015) found that a sample of 313 participants gave an average rating of 6.35 (*SD* = 1.11) out of 7 (strongly agree) to a statement about how people learn in terms of learning styles

Overview of Findings from Recent Studies on Learning Styles

- Numerous reviews have found no evidence supporting that matching the method to an individual's learning style improved learning (e.g., Aslaksen & Lorås, 2018; Coffield et al., 2004; Cuevas, 2015; Pashler et al., 2008)
- Even controlled studies of matching instruction method to learning style have found no support (e.g., Aslaksen & Lorås, 2019; Rogowsky et al., 2015)

So…Why Do So MANY People Still Believe the Myth?

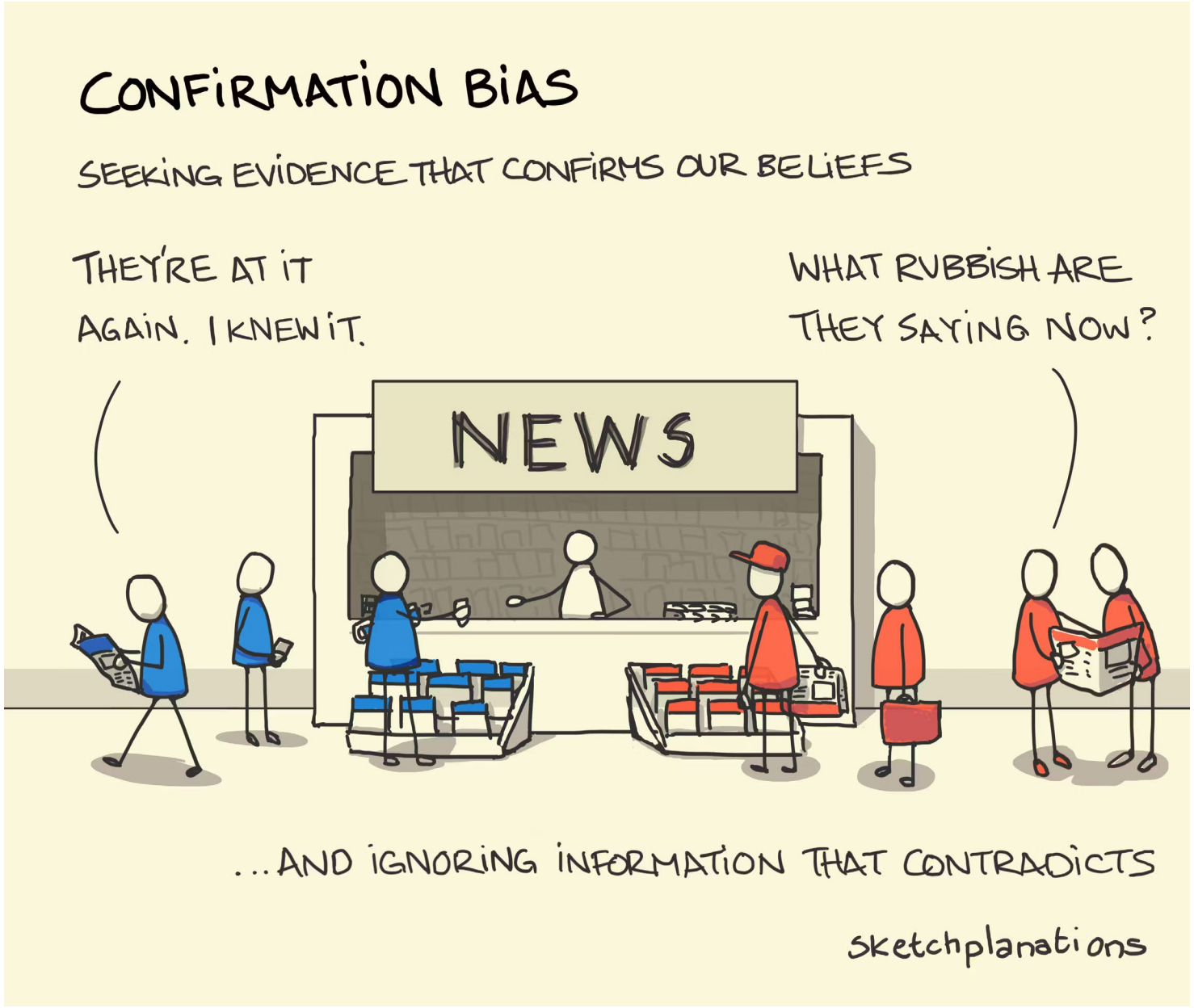
It makes “sense”

Learning style vs. cognitive style/ability vs. learning preference

Relying on “learning style” measures that lack psychometric support

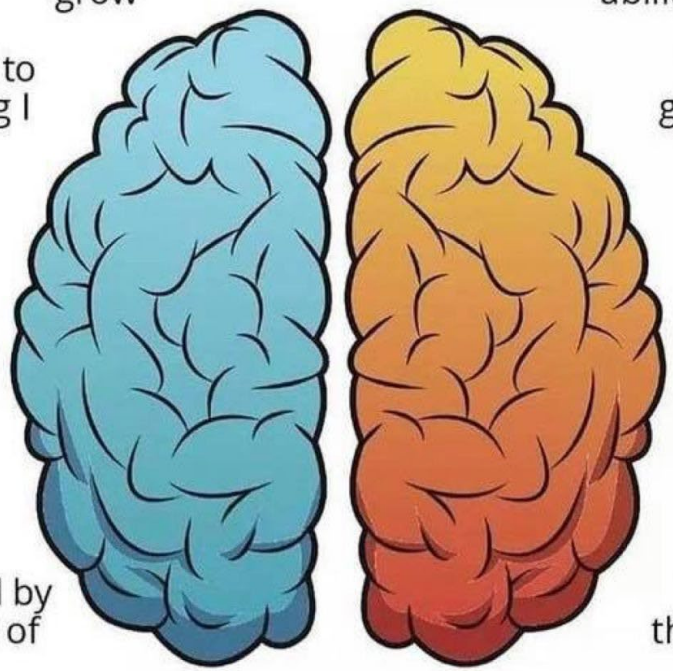
Theories of learning styles have become “common knowledge” (Kirschner, 2017)

Let's Talk About Confirmation Bias!



Dangers of Continuing to Believe in Learning Styles

GROWTH MINDSET vs FIXED MINDSET



Failure is an **opportunity** to grow

Failure is the **limit** of my abilities

I can **learn** to do anything I want

I'm either good at it or **I'm not**

Challenges **help me** to grow

I **don't like** to be challenged

I'm **inspired** by the success of others

Jealous by the success of the others

I like to try **new things**

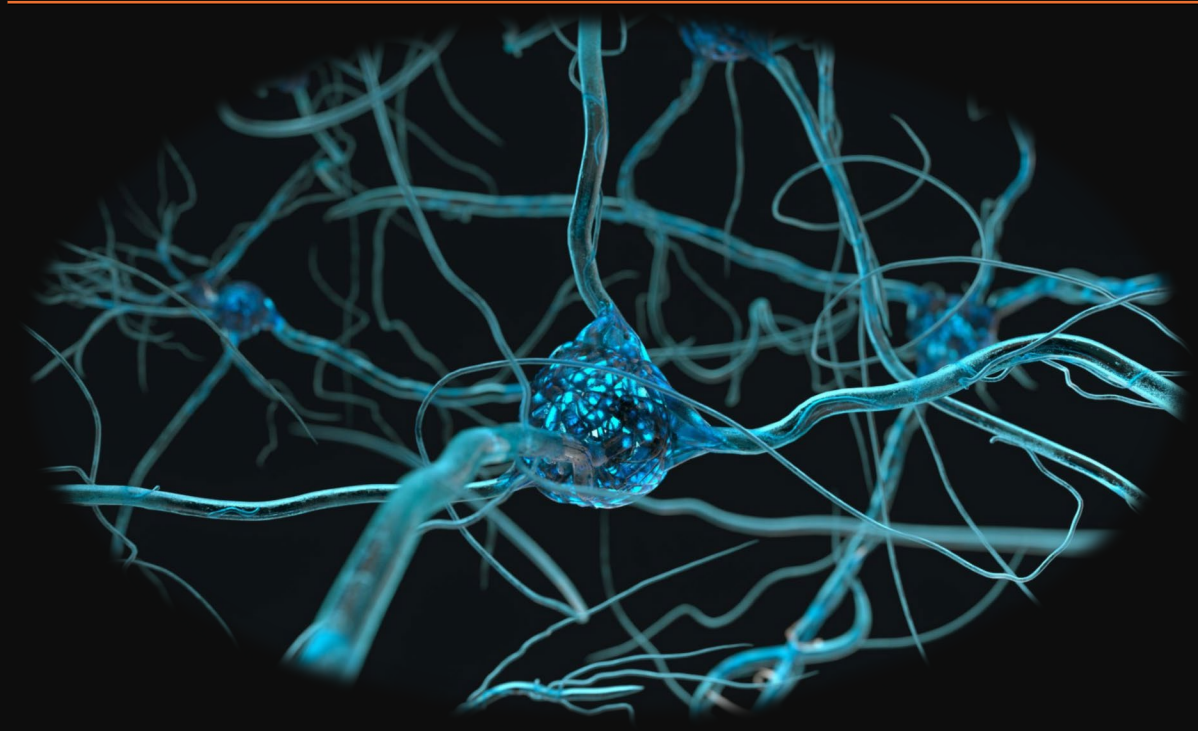
I stick with the **old methods**

Neuroscience Perspective on Learning

Part 2

Basic Neuroscience Principles

- Neurons
- Neural Networks
- Neural plasticity
- Synaptogenesis
- Neurogenesis



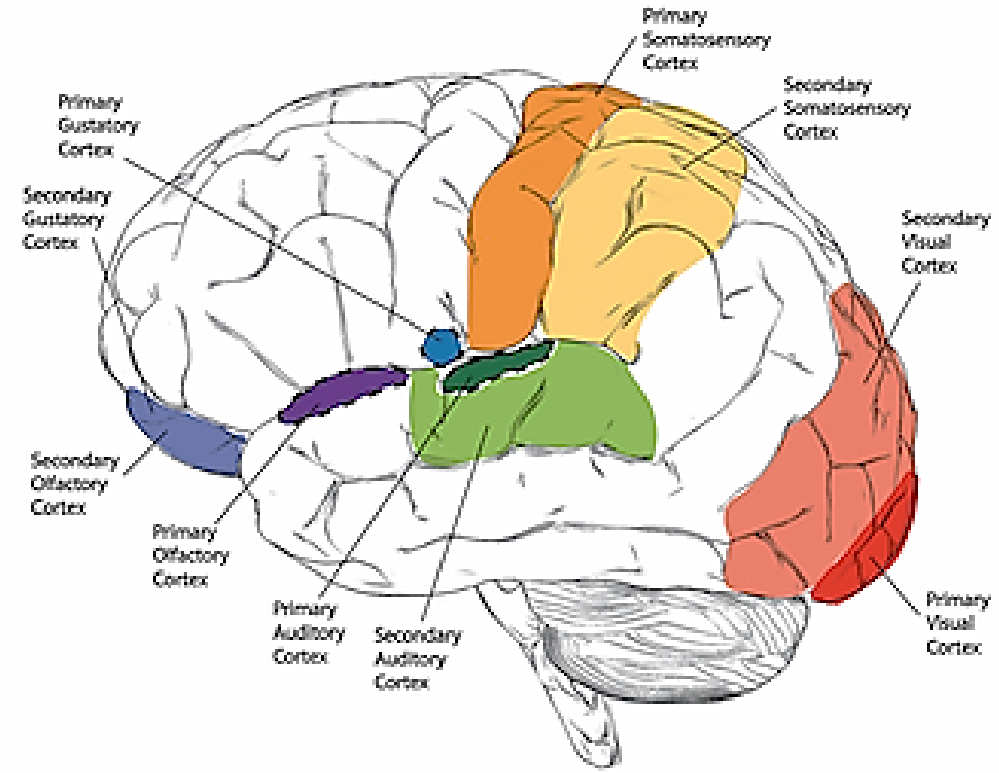
Experience and the Brain

How does the brain change because of experience?

Why is this important for learning and memory?

Experience and the Brain

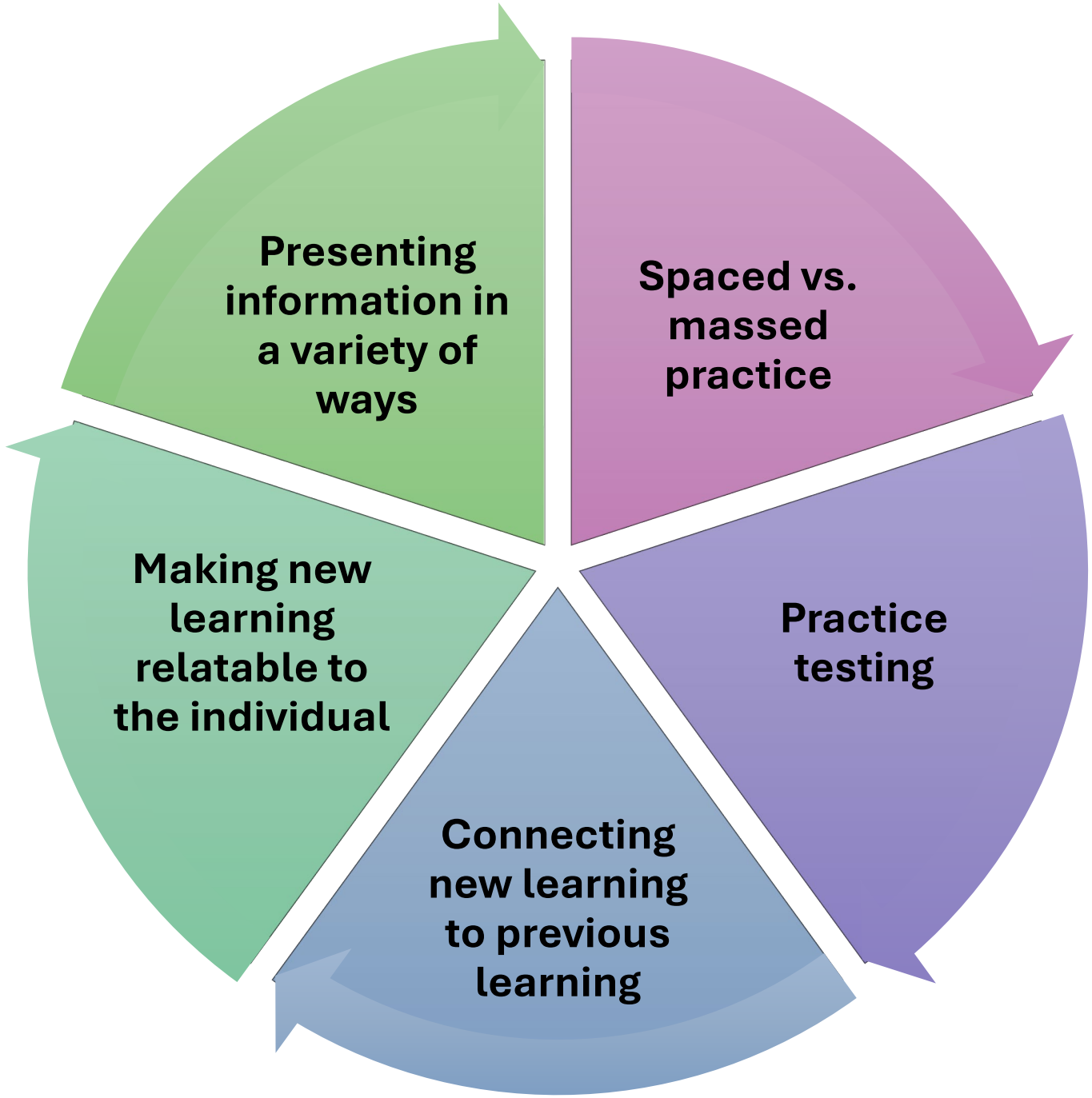
- Neuroscience research and why “learning styles” are not supported by research
  - Multiple modalities
  - Integration of neural processes



Learning to play:

- Watching hockey games
- Listening to descriptions of what is happening and why
- Reading the rules
- Getting out on the ice with a stick and puck
- Being shown how to handle the puck by someone with experience playing
- Playing with a team

Evidence-based Learning Strategies



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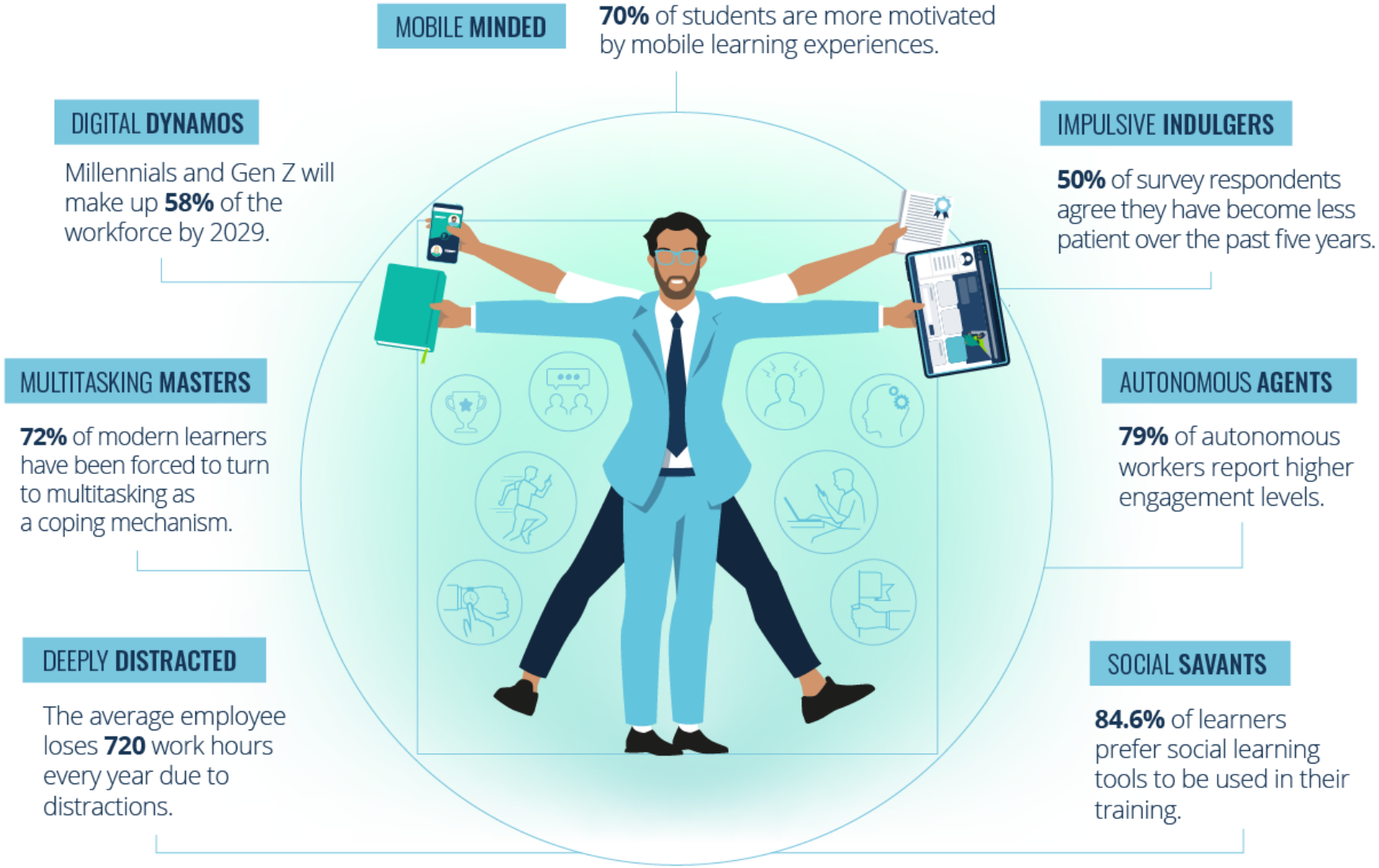
Evidence-Based Learning Preferences of Modern Learners and Active Learning Techniques

Part 3

Characteristics of a Modern Learners

(Cloke, 2024)



KEY DIFFERENCES

ACTIVE LEARNING	VS	PASSIVE LEARNING
Active engagement and participation by learners.		Passive reception of information.
Interaction through discussions, problem-solving, or activities.		Typically one-way communication like lectures or reading.
Encourages critical thinking and practical application.		May lead to memorization without deep understanding.
Enhances long-term retention and deeper understanding.		Can result in surface-level understanding.
Often involves collaboration and peer learning.		Lacks collaborative elements.

Types of Active Learning Classroom Techniques

- Guided Notes
- Practice Exercises
- “Entrance Tickets”
- Matching Games
- Bingo
- Jeopardy (with a twist & traditional)
- Reversed Classroom – Group Presentations
- Reflection Questions
- Private Q&A
- Large Group Q&A

Guided Notes

PSYC396 **Scientific Approach to Survey Design** **Ch. 9**

Step in the Scientific Method	Corresponding Step for Designing Surveys
1. Identify a problem and form a hypothesis	Presurvey Issues

The 1st phase in developing a survey involves identifying the objectives of the survey, defining the objectives operationally, and constructing a plan for completing the survey.

Step 1 is to define the survey's objectives. These come from a particular need, literature reviews, and experts.

Survey objectives:

Literature review:

Experts:

Step 2 is to define the objectives operationally and determine how many questions are needed to gather the information to meet the objective(s).

Operational definition:

Step 3 is to construct a plan for completing the survey. This includes a list of all the phases and steps necessary to complete the survey, an estimate of costs associated with survey development and administration/analysis of survey data, and a timeline for completing each phase of the survey.

PSYC396 **Test Development Process: Steps 1-5** **Ch. 10**

Step in Test Development Process
3. Composing the test items.

The 3rd step in test development is to compose the test items. Test developers choose the item format based on information in the test plan (e.g., target audience, method of administration, requirements for scoring). This is followed with a discussion of standard item formats, including strengths or weaknesses that may cause test developers to choose or reject them as appropriate formats in various situations. Types of test items include the various types of survey questions mentioned in Chapter 9, as well as a few more.

Test item:

We consider item formats in terms of whether they are objective or subjective.

<u>Objective Items</u>

Multiple-choice:

Stem:

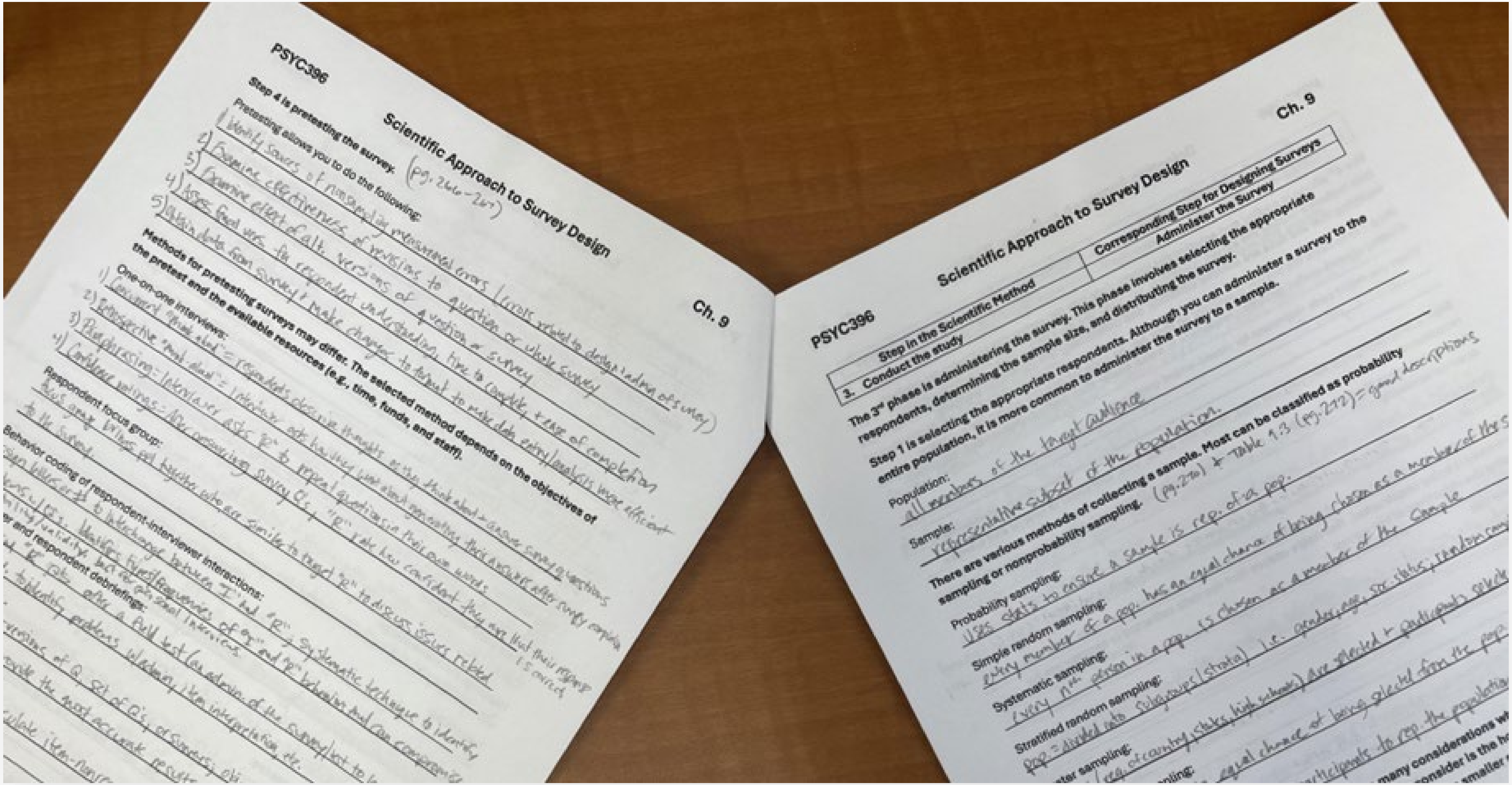
Distractors:

When writing a multiple-choice item, it is important to clearly differentiate the correct response from the distractors. Multiple-choice items are popular because having 1 right answer eliminates confusion or controversy in scoring the correct response, and scoring can be done by a nonprofessional or electronically. One issue with multiple-choice is guessing, which can be offset by presenting a larger number of items.

True/false:

Again, test takers may gain some advantage by guessing using true/false items.

Forced choice:



PSYC396 Ch. 9

Scientific Approach to Survey Design

Step 4 is pretesting the survey.

Pretesting allows you to do the following: (pg. 266-267)

1) Identify sources of nonsampling measurement errors / errors related to design/administration of survey
2) Examine effectiveness of revisions to question or whole survey
3) Examine effect of alt. versions of question or survey
4) Assess final vers. for respondent understanding, time to complete, ease of completion
5) Obtain data from survey & make changes to format to make data entry/analysis more efficient

Methods for pretesting surveys may differ. The selected method depends on the objectives of the pretest and the available resources (e.g., time, funds, and staff).

One-on-one interviews:

1) Concurrent "think aloud" = respondents describe thoughts as they think about + answer survey questions
2) Retrospective "think aloud" = interviewer asks "R" about their thoughts after survey completion
3) Paraphrasing: interviewer asks "R" to repeat questions in their own words
4) Confidence ratings: after completing survey Q's, "R" rate how confident they are that their response is correct

Respondent focus group:

Focus group brings ppl together who are similar to target "R" to discuss issues related to the survey

Behavior coding of respondent-interviewer interactions:

Interviewer and respondent debriefings:

PSYC396 Ch. 9

Scientific Approach to Survey Design

Step in the Scientific Method	Corresponding Step for Designing Surveys
3. Conduct the study	Administer the Survey

The 3rd phase is administering the survey. This phase involves selecting the appropriate respondents, determining the sample size, and distributing the survey.

Step 1 is selecting the appropriate respondents. Although you can administer a survey to the entire population, it is more common to administer the survey to a sample.

Population: all members of the target audience

Sample: representative subset of the population.

There are various methods of collecting a sample. Most can be classified as probability sampling or nonprobability sampling. (pg. 270) + Table 9.3 (pg. 272) = good descriptions

Probability sampling: uses stats to ensure a sample is rep. of a pop.

Simple random sampling: every member of a pop. has an equal chance of being chosen as a member of the sample

Systematic sampling: every nth person in a pop. is chosen

Stratified random sampling: pop = divided into subgroups (strata) i.e. gender, age, SES

Cluster sampling: area of country, states, high schools

PSYC240 **Types of Punishment** **Ch. 11**

Name: _____ **Date:** _____

Review the 4 types of punishment discussed in Ch. 11 of your textbook and complete the following. The punishment techniques described in the book are listed in order of least to most intrusive: 1) response cost, 2) time-out, 3) overcorrection, and 4) reductive techniques similar to overcorrection. It's important to remember there may be undesirable side effects and limitations of punishment. Punishment isn't always easy, practical, or ethical, and it has many potential negative side effects that can adversely affect students' interpersonal functioning.

Response Cost

A form of punishment in which the loss of a specific amount of reinforcement occurs, contingent upon the performance of an inappropriate behavior. The key feature is the loss of something a student finds reinforcing as a penalty for performing some inappropriate behavior.

Identify at least 2 real-life examples of the uses of response costs:

1. _____
2. _____

Identify 4 advantages of a response cost:

1. _____
2. _____
3. _____
4. _____

List the 7 guidelines for implementing a response cost procedure:

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____

What is a response cost lottery?

Practice Exercises

Let's Practice!

- In small groups, work on the **3** practice exercises provided. You have **15** minutes to complete the exercises .
- In your groups, pretend that a client is making the statements to you…
  - Read each of the statements, and then write both a restatement and a probe for thoughts

Chapter 7 Practice Exercises are on the following slides

--AND--

Lecture Moodle page → Lecture/Lab 4 → Chapter 7 Practice Exercises

Practice Exercises

Chapter 8: Skills for Exploring Feelings

Name(s): _____ **Date:** _____

Directions: For each of the following client statements, write a reflection of feelings, a self-disclosure of feelings, and a probe for feelings.

1. **Client:** *"I'm really having difficulty with my schoolwork right now. I have a hard time concentrating because there are so many other things going on. My mother is in the hospital, and I wish I could be there to be with her because she may die soon. When I'm thinking about her, it's hard to get into my work. But I know that what would upset her most is if I got bad grades and didn't finish school."*

   Helper reflection of feelings:

   Helper disclosure of feelings:

   Helper open question about feelings:

2. **Client:** *"When I'm trying to sleep, I keep hearing my parents arguing. I try to hide my head under the pillow, but I still hear them."*

   Helper reflection of feelings:

   Helper disclosure of feelings:

   Helper open question about feelings:

Client Statement #1

"I have a lot of work to do for my classes, but I don't know when I'm going to do it because I have to work 20 hours a week at my job. When I come home from classes and working, I just don't have any energy to do schoolwork. I feel like I need a chance to just 'veg' out and watch TV."

- Helper Restatement:
  - "You don't have much energy right now for your schoolwork."
  - "When you get home from work, you don't really want to do schoolwork."
- Helper Open Question About Thoughts:
  - "Tell me more about that."
  - "What thoughts go through your head when you 'veg' out?"

Exercise 5.1: Do You Know How to Use the Test–Retest Method?

OBJECTIVE

Demonstrate your understanding of when the test–retest method is appropriate and your ability to calculate test–retest reliability and interpret the resulting reliability coefficient.

BACKGROUND

As described in Chapter 5, the most important attribute of a test is its reliability/precision. A reliable test is one we can trust to measure each person in approximately the same way every time it is used. A psychological test without evidence of reliability/precision is not valuable because it may produce inconsistent results every time it is used. One common method we use to estimate the reliability/precision of a test is the test–retest method. To increase your understanding of when the test–retest method is appropriate and how to estimate reliability using the test–retest method of gathering evidence of reliability/precision, for Exercise 5.1, you will answer some questions about the test–retest reliability. You will also calculate and interpret test–retest reliability, calculate the standard error of measurement, and construct a 95% confidence interval.

YOUR TASK

1. **Read the information below.**

Imagine you work as the Director of Recruiting and Selection in the Human Resources (HR) Department of an organization, and being trustworthy (dependable, honest, and responsible) is critical to the success of individuals for many of the positions within your organization. Therefore, you decide to look for a psychological test that you might integrate into the selection process that measures trustworthiness. After conducting research on available tests, you identify a test of trustworthiness. While the test publisher of the instrument claims the test is reliable, you can find little research to confirm there is indeed evidence of reliability/precision. Before deciding whether to integrate the test into your selection process, you decide to gather your own evidence of test–retest reliability.

2. **Answer the questions below.**

What assumption(s) would you need to make if you were going to gather proof the test of trustworthiness had evidence of reliability/precision using the test–retest method? For what types of tests might the test–retest method of estimating reliability not be appropriate?

-Test takers have not changed between 1st & 2nd administration in terms of the skill or quality measured by the test.
-Only appropriate when test takers are not likely to learn something the first time they take the test that can affect their ... administration or when the interval between ... enough to prevent practice effects.

...ake (including the setting and time) to gather evidence of test–retest...

...test to a group of people in group setting
...test to same group of people ~2-5 days later
...test scores for both administrations
...test reliability coefficient
...error of measurement

...r test–retest study, and why?

...similar in age to office workers.
~100 people.
...ase reliability of test results.

...reliable? What would you look for?

...1.00, the stronger the reliability
...a score close to 1.00

...as not reliable, why might this be? What could...

...t administration or scoring

...ests.

$SEM = \sigma\sqrt{1-r_{xx}}$ — σ of one admin of test scores.

3. **Calculate the test–retest reliability and standard error of measurement.** Imagine your test–retest reliability study yielded the data below. Using the process suggested by your instructor (e.g., by hand, using Excel or another electronic spreadsheet program or software), calculate the test–retest reliability and standard error of measurement. Construct a 95% confidence interval around the score of Test Taker 1 and Test Taker 2 on the first administration. Document your answers below.

Test Taker	First Administration Score	Second Administration Score
1	75	82
2	69	75
3	45	45
4	59	60
5	77	78
6	60	80
7	50	70
8	55	60
9	78	80
10	78	76

A. Test–retest reliability coefficient: .79 (online calculator)
B. Standard error of measurement: 5.7
C. 95% confidence interval of Test Taker 1 on First Administration: 63.8 – 86.2
D. 95% confidence interval of Test Taker 2 on First Administration: 57.8 – 80.2

4. **Interpret your results.** Given the results above, answer the following questions:

Do the test scores from the test–retest reliability study provide sufficient evidence of reliability/precision for the test of trustworthiness? Would you use the test in your selection process based on these results? Why, or why not?

I would say yes. The reliability is pretty strong. I might want to get more data first though.

Given your calculated confidence intervals, would it be accurate to say that Test Taker 1 is definitely scored higher in trustworthiness than Test Taker 2? Why, or why not?

No. There is an overlap in their scores.

$\sigma = 12.39$
95% CI = $X \pm 1.96(SEM)$
$75 + 1.96(5.7) =$
$75 - 1.96(5.7) =$
$SEM = 12.39\sqrt{1-.79}$
$12.39(.46)$
$69 + 1.96(5.7) =$
$69 - 1.96(5.7) =$

“Entrance Tickets”

PSYC201 – “Entrance Ticket” Questions and Answers

OVERVIEW

1. List the 6 basic principles stressed by ethical codes.
   Autonomy, Beneficence, Nonmaleficence, Justice, Fidelity, Veracity
   p. 20-21

2. Empathy means…
   Genuinely caring about the client and nonjudgmentally accepting them, being able to predict the client’s reactions, and communicating one’s experience to the client in a sensitive and accurate manner.
   p. 33

3. List the associated skills for each stage (Exploration; Insight; Action).
   Exploration – nonverbal behaviors, minimal verbal behaviors, restatements, open questions/probes for thoughts, reflections of feelings, disclosures of feelings, open questions/probes for feelings
   Insight – challenges, open questions for insight, interpretations, disclosures of insight, immediacy
   Action – Open questions for action, information, process advisement, direct guidance, disclosure of strategies
   p. 37

4. According to Williams et al. (2018), self-awareness is…
   A stable characteristic and a state of heightened self-focus
   p. 52

5. Multicultural competence involves…
   Helpers/Therapists reflecting on their problematic unconscious beliefs and attitudes toward cultural groups; therapists are ethically responsible for learning as much as possible about values, norms, and expectations of various cultural groups; and therapists/helpers are challenged to develop skills for effectively working with clients from diverse cultures
   p. 78

EXPLORATION STAGE

6. What are the 3 goals of the Exploration Stage?
   To attend and listen; To explore thoughts and narratives; To explore feelings
   p. 99

7. How might touching help or hinder the helping process?
   Opinion question

Matching Games

CH 4 KEY CONCEPTS AND TERMS

Directions: On a separate piece of paper (NOT ON THE COMPUTER), complete the following. Organize the terms under five general headings – principles related to increasing behavior; schedules of reinforcement; principles related to decreasing behavior; stimulus control and related terms; response class and related terms. For each term, provide the definition and an example (not identical to the examples in the book).

1. ***Application of contingent stimulation***
2. ***Avoidance conditioning***
3. ***Backward chaining***
4. ***Conditioned punishers***
5. ***Conditioned reinforcer***
6. ***Conditioning***
7. ***Contingent withdrawal of a positive reinforcer***
8. ***Continuous reinforcement***
9. ***Deprivation***
10. ***Differential reinforcement***
11. ***Escape conditioning***
12. ***Extinction***
13. ***Extinction curve***
14. ***Fading***
15. ***Fixed-duration (FD) schedule of reinforcement***
16. ***Fixed-interval (FI) schedule of reinforcement***
17. ***Fixed-ratio (FR) schedule of reinforcement***
18. ***Forgetting***
19. ***Free-access rule***
20. ***Generalized conditioned reinforcer***
21. ***Limited hold***
22. ***Negative reinforcement***
23. ***Negative reinforcement trap***
24. ***Positive reinforcement***
25. ***Premack principle***
26. ***Primary reinforcer***

Application of contingent stimulation	A type of punishment, sometimes called type I, that involves following a specific behavior with some stimulus. A child who is spanked and a student who receives a verbal reprimand from a teacher are examples of the application of contingent stimulation punishment.
Avoidance conditioning	A response that prevents the occurrence of a punisher. This increases the probability of a low-occurring response and maintains that response at a high level. The principle of avoidance conditioning states that a behavior will increase in frequency if it prevents a punisher from occurring.
Backward chaining	A method for teaching a stimulus–response chain. When backward chaining is used, the reinforcing power of the positive reinforcer (presented at the end of the chain) is transferred "down the line" to each discriminative stimulus as it is added to the chain. This makes for very efficient use of positive reinforcement to establish a strong chain.

Bingo

PSYC240 Differential Reinforcement to Decrease Behavior Ch. 10

Name: _____ **Date:** _____

Common properties of differential reinforcement:

- Target behavior performed in the presence of a particular stimulus is reinforced.
- Same behavior not reinforced (placed on extinction) if performed in the absence of a stimulus.

Differential **R**einforcement of **I**ncompatible Behavior (DRI)

Differential **R**einforcement of **A**lternative Behavior (DRA)

Differential **R**einforcement of **O**ther Behavior (DRO)

- DRO Reset Schedule
- DRO Fixed-Interval Schedule
- DRO Increasing-Interval Schedule
- DRO Progressive (DROP) Schedule

Differential **R**einforcement of **L**ow Rates of Behavior (DRL)

- DRL-IRT Schedule
  - Interresponse Time (IRT)
- DRL-Below-Criterion Schedule

DRA: Ms. Annie withholds attention for calling out during circle time. Ms. Annie provides high-quality attention for raising hand during circle time.	**DRA:** Student leaves work table to escape a task demand. When student attempts to stand up at the work table, you physically prompt her to sit down and immediately hand her an "I want a break" card. When student gives the card back to you, you provide praise and allow student a short break.
DRA: Student excessively talks out in class to gain the teacher's attention ("Hey! Hey Ms. Hastings, I have a question! Come here!"). Hs. Hasting puts the talking out on extinction, and only reinforces appropriate hand raising (replacement behavior) and waiting quietly for teacher attention.	**DRO:** Mr. Carlos withholds escape from activity and Goldfish for running away from the table. Mr. Carlos provides Goldfish for NOT running away from the table for 30 seconds.
DRI: Mrs. Beth withholds attention while Marco is throwing toys. Mrs. Beth provides high-quality attention for playing appropriately with toys.	**DRI:** Behavior targeted to decrease is that Toby gets eggs out of the fridge and cracks them on the kitchen floor. Behavior to be reinforced is Toby doing anything with his hands that is not cracking eggs or simply standing in another room.
DRI: Reinforcing a student for keeping their hands folded in their lap rather than touching other students.	**DRI:** Reinforcement is provided for the occurrence of a behavior that is physically incompatible with the behavior to be reduce.
DRA: Reinforcing a student for squeezing a squish ball rather than picking at their head.	**DRA:** Reinforcement is provided for the occurrence of a target behavior that is an alternative to the behavior being reduced.
DRO: Reinforcing a student for any other behavior other than head picking.	**DRO:** Reinforcement occurs for engaging in any response other than the target behavior for a set interval of time.
DRL: Reinforcement occurs for low rates of a target behavior. The target behavior must be relatively acceptable, although if occurring frequently or at high levels of intensity, the behavior is constituted as disruptive.	**DRL:** Reinforcing a student for participating only 3 times per class period rather than 12 times per class period.

DRO	**DRI**	**DRA**
DRL	**DRI**	**DRO**
DRA	**DRL**	**DRO**

DRA	**DRL**	**DRO**	**DRI**	**DRA**
DRI	**DRO**	**DRI**	**DRL**	**DRA**
DRO	**DRA**	**DRI**	**DRL**	**DRO**
DRL	**DRI**	**DRA**	**DRO**	**DRO**
DRI	**DRA**	**DRL**	**DRA**	**DRI**

Jeopardy (with a twist)

Jeopardy – Rip Off: Lake State Psych Style

Basic Rules:

Each group will develop 5 Jeopardy-like questions from the assigned material.

- The questions must be focused on the content (not random details) of the material
- You must also have the correct answer ready (the instructor is not responsible for determining whether a response given is correct)

Once all groups have their questions ready, one group will begin by having a **spokesperson** read the first question/statement aloud (make sure you stand up and face the rest of the class, speak loudly and not too fast).

Each group will also have a minimum of one **spotter**. The spotter's job is to monitor the other groups and identify who was the first person to volunteer to give a response (i.e., hit their group's buzzer). The spotter will then call on that person.

During the Game:

There will be a **60 second timer** which will start once the spokesperson finishes reading the question/statement.

You are allowed to have the material available to search through during the game.

- If the timer expires and no one has correctly responded, a final request will be made and if no one volunteers to give a response, the points will be awarded to the group that asked the question.
- If a response is given during the 60 second time limit and is **correct**, that student's group will be awarded points.
- If a response is given during the 60 second time limit and is **incorrect**, that student's group will not be permitted to attempt to respond to that question. The remaining groups have the opportunity to respond until time runs out. If the timer expires, only the groups who did not respond will have a final opportunity to answer.

Jeopardy – Rip Off: Lake State Psych Style

Each group will take a turn to ask one of their questions and we will rotate through the groups until all questions have been asked or the class is about to end. The group with the most points will receive some extra extra credit.

IMPORTANT!!!!

All responses must be phrased as a question (just like real Jeopardy). Each group will receive one warning (mulligan) but after that, incorrect phrasing of the response will disqualify that group from further attempts on that question even if they give the correct answer the group will not receive a point.

Disclaimer: The instructor reserves the right to modify the rules at any time.

PSYC217 Exam 2 Review Game: Chapters 5-7

Chapter 5 = 2 questions; Chapter 6 = 1 question; Chapter 7 = 5 questions

Group 1:

Chapter 5 – From "The Origins and Nature of the Self-Concept" on pg. 104 to the end of "Knowing Ourselves Through Introspection" on pg. 112

Chapter 6 – From "The Theory of Cognitive Dissonance: Protecting Our Self-Esteem" on pg. 131 to end of "The Justification Effect" on pg. 137

Chapter 7 – From "The Nature and Origins of Attitudes" on pg. 159 to the end of "Predicting Deliberative Behaviors" on pg. 167

Group 2:

Chapter 5 – From "Knowing Ourselves by Observing Our Own Behavior" on pg. 112 to the end of pg. 120

Chapter 6 – From "Counterattitudinal Behavior" on pg. 137 to end of "Avoiding Temptations" on pg. 145

Chapter 7 – From "How do Attitudes Change?" on pg. 167 to end of Attitude Change and the Body on pg. 177

Group 3:

Chapter 5 – From "Using Other People to Know Ourselves" on pg. 121 to the end of "Culture, Impression Management, and Self-Enhancement" on pg. 128

Chapter 6 – From "The Hypocrisy Paradigm" on pg. 145 to end of "Narcissism and the Dangers of Too Much Self-Esteem on pg. 155

Chapter 7 – From "The Power of Advertising" on pg. 178 to the end of "When Persuasion Attempts to Backfire: Reactance Theory" on pg. 186

PSYC396 **Chapter 8 Jeopardy** **Sp24**

Group Members: _____

Directions: Mark your group number. Come up with 5 questions and answers for your section. Make sure to include the page number you found your answer on. Write your questions-answers on this page.

- Group 1 = pg. 211-218 (start @ beginning; stop @ "Discriminant Evidence of Validity")
- Group 2 = pg. 218-224 (start @ "Discriminant Evidence of Validity"; stop @ "In Greater Depth Box 8.1")
- Group 3 = pg. 225-233 (start @ "In Greater Depth Box 8.1"; stop @ "Chapter Summary")

1. _____

2. _____

3. _____

4. _____

5. _____

Jeopardy (traditional)

JEOPARDY BOARD

FINAL JEOPARDY

Chapter 1	Chapter 2	Chapter 3
$100	$100	$100
$200	$200	$200
$300	$300	$300
$400	$400	$400
$500	$500	$500

Topic 1 - $400 Question

The items on 2 IQ tests might be quite different because...

Click to see answer

Topic 1 - $400 Answer

The developers defined IQ differently

Click to return to Jeopardy Board

Reversed Classroom - Group Presentations

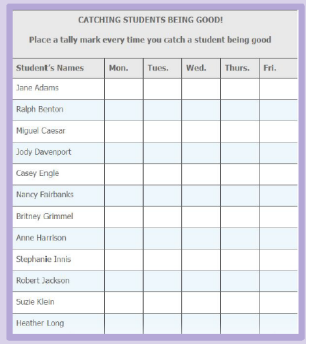
Important Terms

- "Thinking Small"- Teachers can use this technique to catch minor acts of compliance that should be rewarded. For example, raising your hand and waiting to be called on before answering.
- "Gotcha" technique- A reinforcement to catch students and reinforce them following rules for various sections of the school.
- "PEGS Program"- A simulation program for teachers to practice dealing with students who display challenging behaviors. This program will help teachers deal with students that aren't influenced by the "catch students being good" technique.

Examples/Forms

Self Monitoring Cards help teachers keep track of students/behaviors they have rewarded. This is helpful for future reflection.

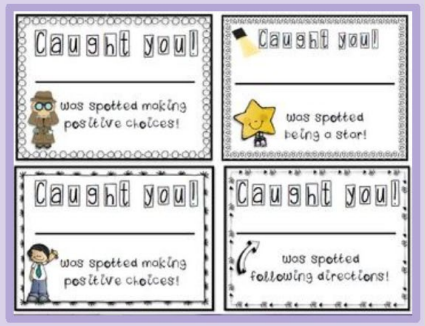
Old MotivAider



CATCHING STUDENTS BEING GOOD!

Place a tally mark every time you catch a student being good

Student's Names	Mon.	Tues.	Wed.	Thurs.	Fri.
Jane Adams					
Ralph Benton					
Miguel Caesar					
Jody Davenport					
Casey Engle					
Nancy Fairbanks					
Britney Grimmel					
Anne Harrison					
Stephanie Innis					
Robert Jackson					
Suzie Klein					
Heather Long					



PSYC240 Reinforcement Techniques (Increasing Behavior) Ch. 9

Presentation Information

Group Members: _____

Assigned Reinforcement Technique: _____

Directions: In small groups, you will research your assigned reinforcement technique from Chapter 9 of the textbook. Using information found in the textbook and online, your group will create a presentation for the class. Requirements for the presentation are listed below.

1. Identify the reinforcement technique and describe what it is.
2. Identify and define important terms to know that are associated with the reinforcement technique.
3. Include content that meets the respective learning objective:
    a. ***9-1 Catch Students Being Good*** = Describe the techniques and programs that can help teachers catch students being good.
    b. ***9-2 Token Economies*** = Describe the purpose and advantages of a token economy and the steps for implementing a token economy.
    c. ***9-3 Behavioral Contracting*** = Describe the mechanisms underlying a behavioral contract and the components for implementing a behavioral contract.
    d. ***9-4 Group-Oriented Contingencies*** = Describe the types of group-oriented contingencies and the rationale and ethical considerations for using them.
    e. ***9-5 Novel Applications of Positive Reinforcement*** = Describe various novel ways for using positive reinforcement.
4. Include examples of any forms and/or charts that may be used with the assigned reinforcement technique. *Your group is welcome to bring handouts if you would like, but it is not required.*
5. Describe at least 2 pros and 2 cons for the reinforcement technique. *These can be your personal opinions.*
6. Reference slide with all sources listed. *APA format is preferred.*

Groups will have class time today and over the weekend to prepare their presentation. These must be emailed to me, and they will be posted on Moodle for other students to use as study tools.

Groups will present on Monday, March 25th during class. Presentations should be 8-10 minutes.

Note: Participation in this assignment counts toward attendance/participation points for your final grade.

Reflection Questions with Small Group to Large Group Discussions

Reflection Question!

- How have you changed since your middle school years to your university years?
  - Identify at least 3 characteristics (e.g., personality, interests, attitudes, values, life goals, etc.)
- How have you remained the same?
  - Identify at least 3 characteristics

- Share your responses in small groups.

The Power of Schemas

Exercise 3-3

- Gather into groups of 3 or 4
- Think of everyday activities you engage in where you use schemas to help you know what to expect in different situations.
  - Examples: What should you expect when you go to the movies? What should you expect when you sit down at a restaurant? What will happen if you go buy fast food?
- What happens when something occurs in your situation that doesn't support your schema?
  - Example: You enter a movie theater, and someone approaches you and asks if they can take your order.
- Identify how many situations you encounter in a day where you apply a schema.

LET'S TALK ABOUT CHANGE!

In small groups, discuss the following questions:

- **How do you relate to change?**
- **Does change come easily for you?**
- **Is change difficult for you?**
- **How do you feel when other people make changes?**

Use the next **5-10 minutes** to facilitate good group discussion

Be prepared to share what your group discussed

Private Q&A

PSYC396 Chapter Questions & Answers Ch. 4-8

CHAPTER 4:

How do we distinguish between ordinal measurements and interval measurements?
-With ordinal measurements, distances or values between numbers are not equal, they can vary. With interval measurement, the distance between the numbers is equal.

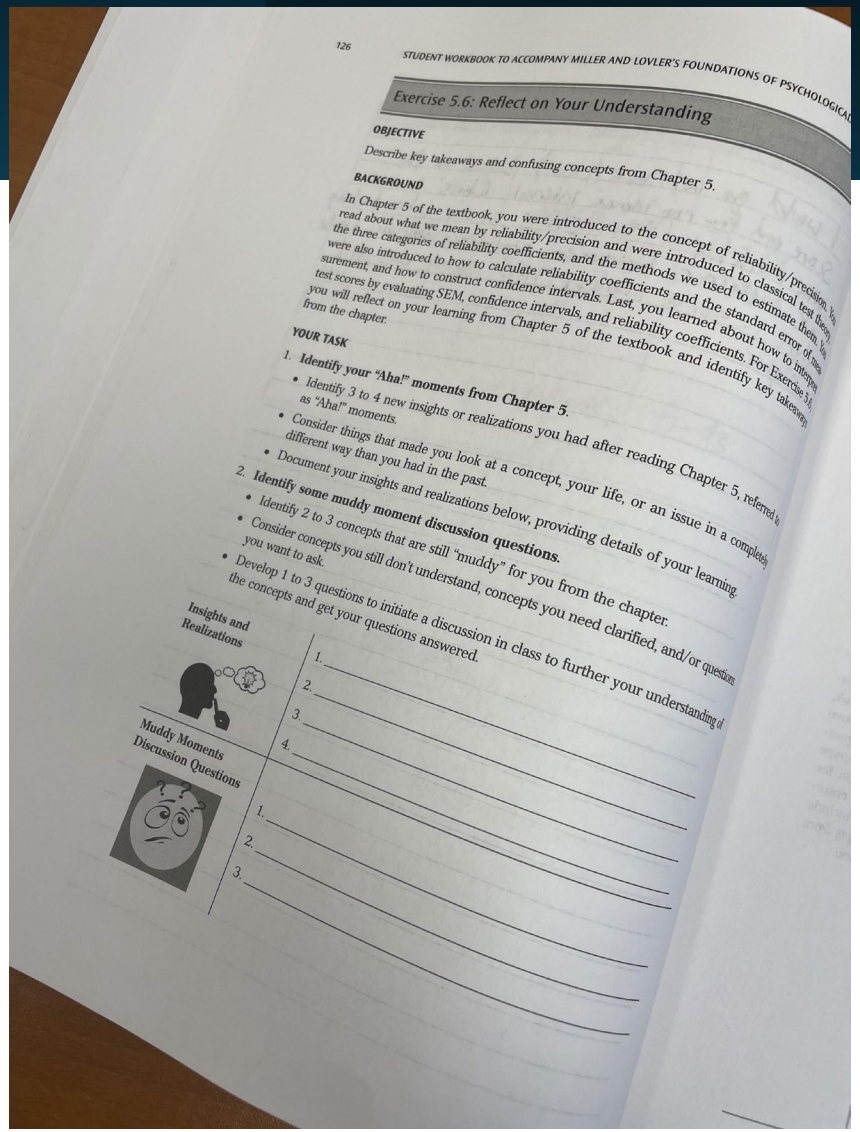
What is the difference between area transformations and linear transformations?
-Linear transformations change the unit of measurement, but do not change the characteristics of the data in any way (e.g., percentages, standard deviation units, z scores, and T scores. Area transformations change the unit of measurement and the unit of reference. They rely on the normal curve and magnify the differences between individuals at the middle of the distribution and compress differences between individuals at the extremes of the distribution (e.g., percentile rank and stanine).

Can you go over (+) and (-) skewed data briefly?
-Positively skewed distributions have one high point and are skewed to the right; there are more low scores than high scores. Negatively skewed distributions have one high point and are skewed to the left; there are more high scores than low scores.

How/when is the Pearson product-moment coefficient calculated?
-Use the link for the calculator I posted on Moodle (https://www.socscistatistics.com/tests/pearson/default2.aspx). It is used for test-retest reliability, alternate forms/parallel forms, internal consistency (corrected by the Spearman-Brown), and interrater reliability (discussed in chapter 5).

Can you explain stanines?
-Stanines are a standard score scale with 9 points that we can use to describe a distribution in words instead of numbers (1 = very poor to 9 = very superior). Scores of 1-3 are below the mean, scores of 4-6 are average/close to the mean, scores of 7-8 are above average, and a score of 9 is exceptional.

Are there any examples you can give for remembering the difference between nominal, ordinal, ratio, and interval?
-Nominal = name; ordinal = order, ratio has a true zero, interval goes below zero (rhymes). Please see the chart I posted with lots of specific examples for each. 😊



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Exercise 5.6: Reflect on Your Understanding

OBJECTIVE

Describe key takeaways and confusing concepts from Chapter 5.

BACKGROUND

In Chapter 5 of the textbook, you were introduced to the concept of reliability/precision. You read about what we mean by reliability/precision and were introduced to classical test theory, the three categories of reliability coefficients, and the methods we used to estimate them. You were also introduced to how to calculate reliability coefficients and the standard error of measurement, and how to construct confidence intervals. Last, you learned about how to interpret test scores by evaluating SEM, confidence intervals, and reliability coefficients. For Exercise 5.6, you will reflect on your learning from Chapter 5 of the textbook and identify key takeaways from the chapter.

YOUR TASK

1. **Identify your "Aha!" moments from Chapter 5.**
   - Identify 3 to 4 new insights or realizations you had after reading Chapter 5, referred to as "Aha!" moments.
   - Consider things that made you look at a concept, your life, or an issue in a completely different way than you had in the past.
   - Document your insights and realizations below, providing details of your learning.
2. **Identify some muddy moment discussion questions.**
   - Identify 2 to 3 concepts that are still "muddy" for you from the chapter.
   - Consider concepts you still don't understand, concepts you need clarified, and/or questions you want to ask.
   - Develop 1 to 3 questions to initiate a discussion in class to further your understanding of the concepts and get your questions answered.

Insights and Realizations

1. _____
2. _____
3. _____
4. _____

Muddy Moments Discussion Questions

1. _____
2. _____
3. _____

Large Group Q&A

Which psychological perspective is followed by a researcher who focuses on how our genes and our environment influence our individual differences?

a. evolutionary
b. behavior genetics
c. behavioral
d. cognitive

Which psychological perspective is followed by a researcher who focuses on how our genes and our environment influence our individual differences? (ANSWER)

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a. evolutionary
b. behavior genetics (correct answer)
c. behavioral
d. cognitive

macmillan learning Psychology in Everyday Life David G. Myers • C. Nathan DeWall | Sixth Edition

Implementing Games Into the Classroom

- Make learning meaningful + engaging
  - Bingo!
  - Matching games
  - Jeopardy (modified version)
  - Kahoot!

Conclusions & Final Thoughts

"LEARNING STYLES" are a **NEUROMYTH**, so PLEASE DON'T RELY ON THEM AS A PART OF YOUR TEACHING STRATEGIES. PLEASE DON'T PERPETUATE THEM. PLEASE, PLEASE, PLEASE, CORRECT IT, IF YOU HEAR IT OR SEE IT!!!

We learn most effectively when we engage multiple sensory modalities AND form connections/associations with new material/information.

Engage learners in as many ways as you can and make it memorable (aka create meaningful experiences when you teach).

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